

AMENDMENTS TO THE SPECIFICATION

IN THE ABSTRACT OF THE DISCLOSURE:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure. A marked-up copy of the Abstract has been provided below.

Abstract

A method and device for determining force exerted on a rolling vehicle wheel are disclosed. Firstly, data on ~~functionality~~ a relationship between a force exerted on a vehicle wheel and a physical parameter such as strain of the radius part of the wheel at predetermined measuring positions are obtained. ~~and using~~ Using the obtained data on the ~~functionality~~ relationship, a formula for the force is made. Then, the vehicle wheel is measured for the physical parameter during rolling, and using the measured physical parameter and formula, the force is ~~worked-out~~ calculated. The force may be a vertical force, lateral force, longitudinal force or self aligning torque. The physical parameter may be the magnitude of a radial strain.

IN THE SPECIFICATION:

Please add the following header immediately before line 2, page 1:

BACKGROUND OF THE INVENTION

Please add the following header immediately before line 16, page 1:

SUMMARY OF THE INVENTION

Please add the following header immediately before line 14, page 2:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following header immediately before line 1, page 3:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please replace the paragraph beginning on page 3, line 5, with the following rewritten paragraph:

Here, a vehicle wheel 2 comprises an radially outermost annular part 2a contacting with the road surface to cause friction against the road surface, and a radius part 2b2 extending radially outwardly from a hub attached to a vehicle axle towards the annular part 2a. In the case of an automobile, as shown in Fig. 1, a vehicle wheel 2 generally comprises a tire 2a and a wheel 2b. The tire 2a may be ~~not only~~ a pneumatic tire, a ~~but also~~ solid tire or the like. The wheel 2b comprises a rim 2b1 on which the tire is mounted and a wheel

disk 2b2 between the rim and a hub attached to a vehicle axle. The wheel disk 2b2 is the above-mentioned radius part, and thus it is meant for ~~not only~~ a disk-like relatively thin part ~~but~~ and also radius rods, spokes and the like.

Please replace the paragraph beginning on page 9, line 24, with the following rewritten paragraph:

In this example, as since the sensors 3 are fixed to the wheel disk 2b2, ~~these the~~ sensors are rotated together with the wheel. Therefore, to transmit the measured data, a wireless transmission system is employed between the vehicle wheels 2 and the vehicle body, which comprises a transmitter TR on each wheel 2b and a receiver RE disposed on the vehicle body. The transmission system may utilize radio waves, ~~lightwave~~ lightwaves or electromagnetic induction.

Please replace the paragraph beginning on page 10, line 14, with the following rewritten paragraph:

As Since the sensors 3 are moved ~~during~~ while the wheel is rotating, it is necessary to locate the sensors 3 with a sensor-locating device TG.

Please replace the paragraph beginning on page 12, line 7, with the following rewritten paragraph:

The analog output of the sensor 3 is usually very small. Therefore, a linear amplifier AMP is used. ~~But~~ However, if the sensor output is nonlinear, a nonlinear or equalizer amplifier AMP is preferably used. ~~if~~ If necessary, an analog to digital converter may be included in the amplifier AMP.